The Institution of Engineers Australia

Engineering Heritage Committee, Sydney

ORAL HISTORY PROGRAM

INTERVIEW TAPE LOG

INTERVIEWEE:	**Peter Murray OAM**
TAPE NUMBERS:	IEA SYD:FH61-67 (7 tapes)
INTERVIEWER:	Frank HEIMANS
DATE AND PLACE:	29 April & 19 May 2004 at Cremorne NSW
DURATION OF INTERVIEW:	387 mins, 45 secs
RESTRICTIONS ON USE:	Nil
LOG PREPARATION:	This log was prepared from DAT tapes

Tape: IEA SYD: FH61 Side A

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	
005	Name and birth details (1925), education. Father's advice to go into coal mining. Father's business venture into transport and career in Army during Second World War. After the war, father became Trade Commissioner to New Zealand and Ceylon.	Marist Bros Mosman Marist Bros School Darlinghurst Anthony Horderns Commonwealth Oil Refineries Tobruk

085	Mother's background – the eldest of 11 children in a grazier's family. Murray was one of five children.	Peak Hill
120	Importance of religion in the family. Came from a very large family. Murray's eldest son is a Marist priest and Murray is still involved in church activities.	Irish Catholic background
158	Values that were imbued in him by family and religion. Is pro-life and a strong culture of caring for children persists. Believes in the institution of marriage and value of life.	Family values
208	Was good at Mathematics and Physics at High School. Started at Sydney University Civil Engineering course in 1943. Describes university work. Got through first two years of university but failed some subjects in third year.	Prof John Anderson
277	Did six months practical work experience in steelworks at Newcastle. During that time, a six weeks strike occurred. Taught Marine Engineering at a private academy part-time.	Steelworks strike Cotteman Academy
351	Failed third year because of his distraction with politics. Was a member of B.A. Santamaria's movement	B.A. Santamaria
371	Got a job with the Joint Coal Board the day he graduated. Worked eight months for the Coal Board, then was employed by Invincible Colliery	Dan Hanrahan Lithgow Gordon Sellers, Joint Coal Board
421	End of tape IEA SYD:FH61 Side A	

Tape: IEA SYD: FH61 Side B

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
000	Tape identification	
001	Political skills learned at university helped him later on to understand the politics of the 1949 Coal Strike	Ben Chifley

015	Describes life during the Second World War. Recalls Japanese submarines in Sydney Harbour. Father was brought home from Tobruk to defend Australia against the Japanese. Food rationing was in force.	World War II Battle of Coral Sea
088	Recalls celebrations in Martin Place on VE Day.	VE (Victory Europe) Day, 6 May 1945.
111	First ever visit to a mine in Lithgow.	Old Renown coal mine
147	Solved his first engineering problem: reshodding shoes of the pit horses.	Pit horses
170	Was appointed as Mechanical Engineer at Invincible coal mine. Designed new mechanical equipment for the mine.	Invincible coal mine
212	Was one of three Cadet Engineers at the Joint Coal Board in 1948. Designed equipment and did surveying for small mines during eight months as Cadet Engineer. Did drawings for Wallerawang power station. Went down Glen Davis kerosene shale mine. Mentions shortage of wire rope and technique for splicing rope when it broke. Shortages persisted well into the 1950s.	Dan Hanrahan Jim Brown Angus Place Wallerawang power station Perry, Superintendent White Bay power station Glen Davis mine
345	Industrial Tribunal was set up in 1946 to hear industrial disputes. Power of unions at that time. Central Committee of Miners Federation was Communist-oriented and militant. Recalls national strike in 1975. Mentions the names of some union organisers and officials.	Coal Industry Act, 1946 Industrial Tribunal Evan Phillips, President of Miners Federation Blackwater mine, Queensland Billy Burke, Colliery Mechanics Association Billy Crane
465	End of Tape IEA SYD:FH 61 Side B	

Tape: IEA SYD: FH62 Side A

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
000	Tape identification	
002	Billy Crane was Secretary of the Colliery Mechanics Association, a union opposed to the Miners Federation. Mentions Jimmy Comerford and Billy Chapman, union leaders. FEDFA controlled digging machine operators and truck drivers in open cut mines, who were on top rate of pay.	Colliery Mechanics Assn. Jimmy Comerford Society of St Barbara Billy Chapman FEDFA
087	Events during Coal Strike of 1949 when Chifley sent in the Army. Staff had to run the Invincible mine, using Army as labourers. Had to mediate an industrial dispute involving the staff of the mine that were working double shifts to keep Army working, with no increase in pay. Dispute was settled.	1949 Coal Strike Charlie Newey
130	Powers of the Joint Coal Board, formed in 1946.	
172	Mines Dept were interested in mining tenures and operated under 1906 Act. Permissions to start a new mine were not needed. Mines Dept also looked after safety in coal mines.	Mines Dept Miner's Right
206	Joint Coal Board recognised danger of coal dust. Introduced regular medical examinations for miners.	Coal dust

216	Introduction of first continuous miner in South Coast mines, which had no dust prevention measures and not enough ventilation. Water spray was added and air flow was reversed to improve conditions for workers.	First continuous miners
268	Role of the Joint Coal Board in assisting, financing and restructuring mines. In later years, friction occurred between Joint Coal Board and Mines Dept.	Role of JCB
282	Travelled on a delegation to China in 1979 to look at Chinese mines. Moves to wind up Joint Coal Board at that time. Interaction between Mines Dept and Joint Coal Board. Other functions of Coal Board: taking over Workers Compensation Insurance and keeping statistics.	Rex Connor Whitlam Government Workers Compensation Insurance
364	End of the Joint Coal Board in 1990s.	
367	Describes daily life and working conditions of the pit horses and horse handlers at Invincible Mine.	Pit horses
440	Location of Invincible Mine, owned by Howard Smith Ltd.	Cullen Bullen
467	End of Tape IEA SYD:FH 62 Side A	

Tape: IEA SYD: FH62 Side B

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	
002	Features of the Invincible Mine and its coal product. Worked coal seam at between 4 and 7 feet in height. Hand-held electric drills were used to deliver coal to one ton skips, pulled by horses.	Bunnerong power station
028	New Jeffrey mining equipment ran on 3 ft 6" gauge and filled rail cars hauled by a battery locomotive. Track-mounted Universal cutting machines with hydraulically-operated booms were also introduced.	Mechanisation equipment Jeffrey mining equipment
065	Temperature within mines was usually comfortable. Exhaust fans had intake and return airways. In 1950s Gypsy Moth propellers were used to generate airflow.	Airflow Gypsy Moth propellers
106	Installed new Jeffrey coal face cutting equipment at Invincible mine. Challenges in laying tracks and getting equipment down the mine. Also built new workshops, bathrooms, offices and cottages for staff. Maintenance problems on old conveyor belts. Productivity increases by using new Jeffrey equipment. End of an era for pit horses.	Huwood Conveyor Company
201	Stayed 4 years at Invincible Mine. Married in 1949 and had three children by 1952. Found a new job at Bellbird Mine in 1952.	Bellbird Mine
214	Met his wife, Secretary of the Newman Society at university. Still meets up with former members of the Society after 55 years. He and his wife have 9 children.	Newman Society
251	Obtained his Mine Manager's Certificate.	

272	Differences between Invincible and Bellbird mines. Advantages of Greta seam coal at Bellbird mine, low in ash content. Worked at 1250 ft deep. Mine employed 600 men and annual production was about 350,000 tons per year. Today a mine with 206 persons produces 2.2 million tons with increased mechanisation.	Hetton-Bellbird Company Greta seam coal
333	Bellbird coal was subject to spontaneous combustion. Explains oxidising of coal.	Spontaneous combustion
381	Left Bellbird Colliery after one year in 1953. Mine was closed, then with modern equipment was reopened, but mine has sporadic history.	
395	End of Tape IEA SYD:FH 62 Side B	

Tape: IEA SYD: FH63 Side A

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	
005	Challenges at Bellbird Mine, working at depth of 1250 feet, 2 miles from entrance. Endless rope haulage at first stage of mine still existed. Contract miners still filled skips with shovels. Problems with maintenance of conveyors. New rubber-tyred shuttle cars were put in service.	Joy Manufacturing company
050	Roof bolts first installed in Elrington Colliery. Roof at Bellbird was falling in. Recalls a crossbar prop bending. Tried wooden roof bolts. Designed and installed new dowels and wooden plates with wedges, but system did not work	Elrington Colliery
095	Trouble with air ventilation at Bellbird Mine. Acquired new device to measure air pressure differences. Found restrictions in air pressure due to small opening in underground tunnel. Recalls another instance where a large reel left behind by workers affected the air pressure with its bulk.	Air pressure measuring device
158	Describes Bellbird Mine- three parallel roadways: return airway, rope road and walkway for men and horses. Tunnels were built at right angles from main shafts, about 30 metres apart and there might be hundreds of them. Pillars were extracted on retreat and then the roof was allowed to fall in. Refers to a mine in Illinois USA where tunnel was 21 miles from mouth to the coal face.	Layout of Bellbird mine
222	Before new machinery was installed at Invincible, a lot of the coal was 'grunched' (coal was not cut but holes were drilled and coal was blasted out) and mechanical hand held coal cutters were also used to make cuts for explosives to blast into.	Grunching

258	Biggest safety concern at Invincible mine was floods. Mine was flooded for three months in 1949 and a new pumping system was installed. Installed electrical cables standing in water up to his chin. Floods also washed out the railway line from Cullen Bullen station and water from a creek poured into the mine.	1949 rains caused floods
299	Coal at Bellbird was so combustible that it would catch on fire within a week if dumped two truckloads high. Susceptibility to fire varies with types of coal.	Fire susceptibility
328	Did not understand the mechanisms of roof pressure at the time. Today computer can predict roof pressure and 'crush and creep'.	Roof pressure
373	Recalls during his days with Joint Coal Board in Lithgow Valley Colliery where a sound like a thunder clap meant that a section of the roof had caved in and timber supports had snapped and compressed.	Lithgow Valley Colliery
396	Accident rates were more frequent then- it would measure 400 lost time injuries per million manhours. Today the rate is 10 lost time injuries.	Lost time injuries rate per manhours then and now
421	End of tape IEA SYD:FH 63 Side A	

Tape: IEA SYD: FH63 Side B

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
000	Tape identification	
003	Does not recall any serious accidents at Invincible, Bellbird or Millfield mines, but at Rhondda mine lives were lost. During his working life recalls a total of five fatalities. Gives details of individual accidents and how it feels having to tell relatives that a miner has been killed.	Serious accidents in mines Fatalities

064	Accident rates have improved greatly and in the mine of which he is a board member no lost time accidents have occurred in the past year.	Accident rates
083	Never had a legal case for negligence resulting from accidents during his time, but workers families were compensated by coal mine insurance policies taken out by mine owners.	Claims for injuries or death and compensation
098	Alligator skips were used at Ayrfield mine on very steep inclines.	Alligator skips
128	Bellbird was a modern installation for its day, but was neglected during war. Attempts to modernise it post-war did not work.	Bellbird mine
145	Bellbird mine operated into the 1980s in fits and starts. R.W. Miller & Co bought Bellbird's entire output for 15 years during 1970s until the mine closed.	R.W. Miller & Co
158	Describes different types of coal and their attributes. Importance of ash and sulphur content and temperature where these melt and become problematic. Gas in fluid material also needs to be controlled when heated during coke manufacture. Importance of knowing Swelling Index in coal and coke characteristics.	Steaming coal Coke Swelling Index Ash content
251	Became Manager of the Millfield and Millfield North mines. Output was 300 tons a day. Describes two classes of miners: Contract Miners and Contract Wheelers. Miners were paid by the ton. Strikes were frequent and would occur on two days every week. Every morning at 7am a union meeting was held to determine whether the men would work or strike on that day.	Bill Colvin Bede Kelly Contract miners Contract wheelers Shiftmen Jim McWilliams
332	At Millfield, roof pressures had pushed pillars into the floor and the roof had come down and had to be opened up again so that the mine could be worked.	Bord and pillar mining
360	Horses were still used at Millfield mine, which closed 21 months after Murray started there. Went on to Millfield North mine then.	Closure of Millfield mine
387	End of Tape IEA SYD:FH 63 Side B	

Tape: IEA SYD: FH64 Side A

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	
005	Explains in detail three different methods of mining coal: open cut, bord and pillar and long wall.	Open cut mining Bord and pillar mining Long wall mining
192	Maximum amount of coal that can be expected from a mine: 80% is good, 50% in less mechanised mines in the past.	
211	Describes what he knows about the explosion at Bellbird mine in 1923 in which 21 miners lost their lives. Danger signal was raised when kerosene smell permeated the mine.	Disaster at Bellbird Mine (1923)
255	Canaries were still used in the mines. The Mine Manager made sure they were looked after. In the 1970s, electronic carbon dioxide meters came into use and replaced canaries.	Canaries Electronic carbon dioxide meters
303	Describes typical day for contract miners, who were paid for their coal output per ton. In the 1940s, miners were paid a basic rate to compensate them for low yields. Miners had to achieve minimum daily output of one darg filled with coal. Wheelers hauled skips into the mine face and were also on contract. Wheelers would become miners when they had enough experience. Other mine workers were shiftmen, bricklayers who would build stoppings to seal tunnels, mechanics, electricians and Deputies.	Contract miner's typical day Darg Wheelers
458	End of Tape IEA SYD:FH64 Side A	

Tape: IEA SYD: FH64 Side B

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	
002	Mines all had a bathhouse, except in Indonesia.	Bathhouses
020	Joined R.W. Miller Pty Ltd and became Manager of Millfield Colliery in 1953. Additional responsibilities for personnel. Frequent disputes made industrial relations difficult. Communists ran unions. Dispute over claim for excessive use of explosives.	R.W. Miller Pty Ltd Millfield Colliery Jim McWilliams, union leader
090	Cessation of Millfield North Colliery in 1953. Ten thousand miners were sacked in Cessnock between 1953 and 1955 due to effect of oil importation and building of refineries.	10,000 miners sacked
109	Reasons for sacking of miners: residue of petroleum refining, Petroleum Coke, was cheaper to sell than coal and took some of the market for coal and second reason, introduction of modern machinery into mines at Cessnock alleviated need for many workers. Many sacked workers found new work at the Newcastle steelworks.	Petroleum Coke
154	Why he joined Northern Rhondda Colliery in 1955. Found a replacement for Millfield mine.	Northern Rhondda Colliery
193	Differences between Northern Rhondda Colliery and the mines he had previously worked at.	
221	Workmen tested him during his first week at the colliery. Solved difficult industrial relations with workers and created an understanding between workers and management. Produced some wins for the union officials.	Relations with workers and unions. Jack Dumbleton
315	Visited a very technically advanced mine in UK in 1979 which did not produce much coal because of mine manager's attitude to his workers.	Example of mismanagement at UK mine
380	Story of rehabilitation of Clem Moy from his drinking problem.	Clem Moy
413	End of Tape IEA SYD:FH64 Side B	

Tape: IEA SYD: FH65 Side A

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	
004	Changes in use of coal during 1950s and 1960s. Inroads made by oil, town gas and natural gas into coal market. BHP produced its own coal to produce coke.	Changes in use of coal
051	Construction of new power stations in 1950s dampened demand for Hunter Valley coal because Electricity Commission built mines adjacent to new power stations. Towards end of 1950s, Japanese steel mills became a major export market for coal.	Wangi power station
083	Japanese market demand necessitated blending of various types of Hunter Valley coal to produce a coal suitable for Japanese steel mills' coke ovens. First coal exports to Japan in 1958 started off a whole new trade.	Japanese demand for coking coal
127	Oil Shock of 1973 made coal a more attractive proposition and prices of thermal coal shot up because of demand.	Oil Shock (1973)
145	Construction of other new mine mouth power stations in 1950s to supply electricity demand and industrial demand from new aluminium smelters. Natural gas supplies to Sydney killed off industrial market for coal.	Munmorah Vales Point Liddell Bayswater Eraring
173	By 1958, R.W. Miller put in a coal preparation (washing) plant because of market demands. Internal efficiencies made up for 40% of production that was lost to coal preparation.	Coal preparation plants
263	Built a special machine to put up timber to support cross bars to the roof of mines. Also produced a means of simultaneous shot facing of explosives.	Special designs made for improving mining methods

325	Reasons for joining C.A. Burgmann, a metal manufacturing company as General Manager in 1965. Worked there for five years. Company supplied all valves and water pipe fittings for all of NSW except Sydney.	C.A. Burgmann Alex Forsythe
432	End of Tape IEA SYD:FH65 Side A	

Tape: IEA SYD: FH65 Side B

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	
002	Had to learn the metal manufacturing industry and pick up a new range of accounting and selling techniques. After five years, sold the business to another company in the same field.	Institute of Management STG Manufacturing
051	In 1970, was offered a job at R.W. Miller as Superintendent of all their mines.	Superintendent of Mines, R.W. Miller
078	R.W. Miller's operations had changed during the five years he was away. A new mine had been opened up for the coking coal trade. Production had gone up. Was able to introduce new management techniques such as costing systems for the coal industry and computerised systems.	Changes at R.W. Miller in five years
132	In 1971 was promoted to General Manager, Mining. Travelled overseas, particularly to Japan and did all the technical presentations.	General Manager, Mining at R.W. Miller
154	Japanese buyers were very discerning and competent. Travelled overseas to buy new equipment. Opened Mt Thorley Mine in 1980, a huge mine and his biggest achievement.	Mt Thorley Mine, Hunter Valley
191	Before opening Mt Thorley mine, did a lot of exploration and studies to solve future environmental problems. Jim Croft wrote his first Environmental Impact Study, which was given to the mine designers. Had an input into mining equipment and systems and design of the preparation plant.	Environmental Planning & Assessment Act Jim Croft
262	His biggest challenge on the Mt Thorley project was on the industrial side, with five unions involved.	Industrial battles

290	Hunter Valley provided opportunity for open cut mines. Comments on advantages of open cut mining. At a certain point, it becomes more economic to go underground. Explains how long wall mining can be introduced into the open cut mine.	Open cut mining techniques Long wall mining
358	Underground mines gradually closed fro the 1970s because they ran out of coal or became uneconomic. Wallsend mine closed in 1988, Preston mine was sold to Bob Cameron in 1995.	Belmont mine Wallsend mine Preston mine Delta Colliery Bob Cameron
411	End of Tape IEA SYD:FH65 Side B	

Tape: IEA SYD: FH66 Side A

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	
005	How R.W. Miller got into the shipping trade and acquired his mines. Miller survived a miner's strike in 1929 and thereafter was fairly free of strikes. In 1970 he started in oil tankers. Miller instructed Cliff Jones to go overseas and buy a tanker. Miller was politically well connected and he also had Seaman's Union support. Recalls Miller getting political advice on who would be the next Prime Minister. Miller bought some tankers and then built three.	Roderick Miller Lighters 60-Milers Ayrfield mine Alan Brown Cliff Jones
178	How R.W. Miller lost some of his ships through fires and accidents. R.W. Miller was taken over by Coal and Allied in 1985. Still owns Mt Thorley Mine and 10% of coal loading facility at Newcastle.	Coal and Allied Howard Smith
211	Reviews his 10-year return period with R.W. Miller from 1975-1985. Large resources of coking coal were discovered in Queensland and tried to enter that territory.	Coal discoveries in Queensland
258	Takeover battle for R.W. Miller in 1972/73 between Howard Smith and Ampol resulting in a new board with one-third ownership by Miller, Howard Smith, TNT & Ampol. Finally secured a 20% share of Oakey Creek Mine. Established a Brisbane office and put in a bid on the Curragh Mine. Produced a feasibility study for Curragh mine. Obtained a commitment from Japanese steel mill to supply a million tons of coal a year and developed Curragh mine. Finally, Atlantic Richfield repaid the expenses of producing the feasibility study.	Ampol TNT John Evans Wal Trotter Sir Ian Potter Sir Peter Abeles Alex Carmichael Sir Walter Lennard Ted Harris Curragh mine Atlantic Richfield
426	End of Tape IEA SYD:FH66 Side A	

Tape: IEA SYD: FH66 Side B

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	
003	Being a good Mine Manager is like being a ball juggler – being able to do many tasks and keep everyone interested.	
046	Biggest crisis he had to face: oil shock of 1973, then drop thereafter in price of oil, making it more competitive. Set up an advanced computer system to determine maximum profitability- costing of all mines and markets. Had to shut down some mines to make the business more profitable.	Biggest crisis Oil Shock of 1973
093	Systems for environmental controls became more sophisticated. Had to control dust emissions in cartage of coal. Introduced measures for noise control within the mine and designed management system for water used in the mine and moisture content of coal. Salinity must also be controlled. Landscaping for rehabilitation of soil and earth after open cut mining is necessary.	Environmental controls
215	Importance of good relationship between Hunter Valley population and mining companies. Local residents were invited to barbeques.	Good Neighbour Policy
238	Recalls conference held in Singleton 29 years ago on development in the Hunter Valley by mining professionals. Put forward a suggestion that more locals should be involved in such an event. Was the start of Singleton Coal Day. Community consultation process is now much more sophisticated and has become mandatory for new developments.	Institute of Metallurgy Singleton Council Mine Managers Association Institution of Engineers Singleton Coal day
325	Discusses his role on the State Mine Subsidence Board. Old mines usually collapse 50 years after mining ceases. After some houses collapsed, the Board was set up to compensate owners for damage and loss to housing. Was the Coal industry representative for 13 years. Discusses the considerable powers of the Board.	State Mine Subsidence Board

431	End of Tape IEA SYD:FH66 Side B	

Tape: IEA SYD: FH67 Side A

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	
003	During his time on the Board, computerised all the activities and records of the Board.	State Mine Subsidence Board
016	Old shallow mines had to be filled when a boy entered a hole in an old mine and was killed by poisonous gases. Started up a system of informing the public and schools of the danger of mines. Holes are now sealed within 24 hours when a new hole is discovered.	Danger to public of old mines.
036	Recounts his role as a Director of the Board of the State Dockyard at Newcastle. Discussions with State Government politicians. Inability of the government to run the State Dockyard successfully	State Dockyard at Newcastle Laurie Brereton Barrie Unsworth Pat Hills Ken Booth Alan Forsythe Steve Forgacs
090	Left R.W. Miller in 1985 and professional activities since then. Became a consultant to Minenco.	Minenco CRA Rio Tinto
111	Was appointed a Commissioner of Australian National Railways for eight years and turned it into a profitable business.	Australian National Railways.
132	Is presently on the board of Camberwell Coal. Consulted when the mine was on the drawing board on the mine design.	Camberwell Coal
146	Helped Surpac Minex to set up software for mine planning.	Surpac Minex
160	Consulted with a company to help Rix's Creek Mine go through development applications and consent.	Rix's Creek Mine

165	Consulted for CRA-Rio Tinto on projects in Indonesia. Helped to rebuild State Mining Corporation of NZ. Has consulted on mine development and introduction of new technology in China.	State Mining Corporation of NZ
175	Is a Director of two mines with interests in Queensland and is Director and Manager of a company in the Hunter valley	
192	Is involved in arguing for compensation for owners who lost rights to mine under their land since Coal Acquisition Act was introduced by the Wran Government in 1982.	Neville Wran Coal Acquisition Act, 1982
212	His biggest victory is being on such good terms with his children. Believes in giving when somebody needs it and runs his family on that basis. Had a difficult time in 2003 with illness in the family.	Personal victories
268	Made some mistakes - regrets not having communicated enough with his family at times. In the 1960s, got involved in the push for State Aid for Catholic Schools, which took up a lot of his time at family expense.	State Aid for Catholic Schools.
325	Thinks that he could have done more to save miners' lives in the early days. Today lost-time accident rate is very low.	Regrets
336	Events when friends of his lost their lives in mine accidents still haunt him, but feels no culpability. It is important to remind mine staff of possibility of accidents, even though accident rate may be low.	
392	Has enjoyed all of his life and 55 years of marriage. Has been much involved with the Church.	
426	End of Tape IEA SYD:FH67 Side A	

Tape: IEA SYD: FH67 Side B

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
001	Tape identification	

002	Is optimistic about the economic future of Australia as long as we remain reasonably competent managers. One worry about the future he has is secularism and decrease in fertility rate. Is against abortion in any culture and the United nations plan to make abortion a part of the Declaration of Human Rights. Worries about abortion and aging populations. Also worries about Muslim, Chinese and Indian increase in population.	Worries about the future
101	End of Tape IEA SYD:FH67 Side B and end of interview with Peter Murray	